

## MULTIPLEXER FOR A PIEZO CERAMIC IDENTIFICATION DEVICE

### ABSTRACT OF THE DISCLOSURE

A multiplexer for a biometric apparatus having at least fifty thousand piezo ceramic sensor elements arranged in a two-dimensional array on a pitch spacing equal to or less than approximately two hundred microns. The multiplexer includes a plurality of first and second orthogonal conductors. Each of the first conductors is coupled to Y piezo ceramic sensor elements. Each of the second conductors is coupled to X piezo ceramic sensor elements. Switches couple the first conductors to either an output port of a signal generator, a high impedance node, or a low impedance node. Switches also couple the second conductors to either an input port of a processor, a high impedance node, or a low impedance node. Shift registers coupled to the switches are used to control the position of the switched.